

**Abstract**

A process for preparing a high-concentration formaldehyde solution by removing water from a lower-concentration formaldehyde solution having a formaldehyde content of from 5 to 50% by weight, in which the lower-concentration formaldehyde solution is fed to a preheater and heated in the preheater, depressurized via a pressure maintenance device and concentrated in a helical tube evaporator to give a vapor stream and the high-concentration formaldehyde solution as bottom stream, wherein the heated lower-concentration formaldehyde solution is depressurized in the pressure maintenance device to give a two-phase mixture which is fed into the helical tube evaporator, is proposed.